Remarks

Following the above amendments, claims 23-30 are pending in this application. Before the above amendments, claims 1-10 and 17-22 were pending in this application. The Examiner rejected each of claims 1-10 and 17-22 on the ground that these claims are obvious under 35 U.S.C. § 103 in view of allegedly admitted prior art in combination with U.S. Patent No. 5,591,984 to Drucker.

A.   Independent Claims 23 and 27

The invention of independent claims 23 and 27 is not disclosed by any combination of the allegedly admitted prior art or Drucker. The invention claimed herein includes a switch design that is different from and superior to that of Drucker.

As compared to the design disclosed in Drucker, the design of the present invention involves a switch for each processor that is coupled to three inputs: (a) the debugging output of the previous switch; (b) the debugging output of the associated microprocessor socket; and (c) a logic signal taken directly from the associated microprocessor socket. This three input port design is advantageous, as compared with the design of Drucker, because each of the two possible signals that could be passed (the debugging output of the previous switch or the debugging output of the associated microprocessor socket) is present at an input port of the switch. Thus, the switch receives each of the two signals that could be passed and passes only that signal that should be passed.

In operation, the decision to pass either the signal from the previous switch or the debugging signal from the microprocessor socket is made on the basis of a logic signal that is taken directly from the microprocessor socket and is the third input to the switch. This logic

signal is a signal from the microprocessor socket itself and indicates definitively whether a microprocessor is present in the socket.

The design of Drucker is different from and not comparable to the invention disclosed herein. In Drucker, each switch sends or does not send a signal to a slot on the basis of a determination of whether the module in the slot is drawing current. (See Drucker, col. 1, lines 46-55). The switch of Drucker is in a topological location *before* the slot. In contrast, the switch of the present invention is in a topological location *after* the microprocessor socket. As such, the switch of the present invention receives both of the potential signals and passes the correct signal on the basis of a logic signal received from the microprocessor socket.

The design of the present invention is superior to that of Drucker. The design of Drucker sends or does not send a signal to a slot on the basis of a determination of whether the module in the slot is drawing current. (See Drucker, col. 1, lines 46-55). As such, Drucker would not pass a signal to a slot that is occupied by a module if the module was not drawing a sufficient amount of current to trip the current sensing switch 36. Thus, even though the slot was occupied by a module, the design of Drucker would dictate that any debugging signal would necessarily bypass this module as a result of the inability of the module to draw a sufficient amount of current. In this situation, any debugging signal in Drucker would not reach the module that would be in the most need of actually receiving the debugging signal. Drucker could very well return a debugging signal indicating that all is well, even though a module of Drucker is not drawing sufficient power.

In contrast, this circumstance would not occur with respect to the design of the present invention. The invention claimed herein does not rely on a measurement of the current being drawn by the module. Rather, the design claimed herein relies on a "socket occupied"

logic signal from the socket itself. If the socket were occupied by a microprocessor that was drawing insufficient current, the switch would nevertheless pass the debugging signal that passed through the microprocessor. The passed debugging signal could therefore possibly indicate that the microprocessor in the socket was drawing insufficient current, thereby fulfilling the purpose of a debugging signal that passes through each microprocessor that is present in the computer system, including those microprocessors that are not drawing sufficient current function properly.

Applicant respectfully submits that Drucker, when considered alone or in combination with the allegedly admitted prior art, does not disclose or suggest the invention of claims 23 and 27. Applicant respectfully submits that these claims should be passed to issuance.

B.   Claims 24-26 and 28-30

Claims 24-26 and 28-30 will not be discussed individually as each of these claims depends, either directly or indirectly, from an otherwise allowable base claim. Applicant respectfully submits that these claims should be passed to issuance.

<u>Conclusion</u>

Applicant respectfully submits that pending claims 23-30 of the present invention are allowable. Applicant respectfully requests that these claims be passed to issuance.

Respectfully submitted,

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